AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listing of claims in the application:

Listing of Claims:

1. (Currently Amended) A single crystal oscillator RF transmitter system comprising:

a microprocessor having a control signal output and a data output for output of digital data to be transmitted;

a converter coupled to said microprocessor data output for converting the digital data output from the microprocessor into digital packet data to be transmitted by the system;

an external crystal oscillator;

a local oscillator ~~responsive to an~~ receiving a frequency signal from the external crystal ~~for~~ oscillator and generating a first clock signal having a frequency in a radio frequency band responsively to said external crystal oscillator frequency signal;

a clock switch coupled to the local oscillator for providing a second clock signal at a lower frequency than the first clock signal to the microprocessor and a third clock signal to the converter, the third clock signal being a different frequency than the first clock signal and the second clock signal, the clock switch

having an input coupled to the control signal output of the microprocessor for receiving a command therefrom to start the local oscillator to generate the first clock signal; and

a transmitter connected to an output of the converter for receiving the digital packet data and being coupled to the local oscillator for use of the first clock signal as an RF carrier for the digital packet data to be transmitted by the transmitter;

wherein the microprocessor, converter, local oscillator, clock switch and transmitter are integrated on a chip.

2. (Previously Presented) The system of claim 1, wherein the clock switch comprises a frequency divider for frequency-dividing the first clock signal to generate the second clock signal.

3. (Previously Presented) The system of claim 1, wherein the clock switch comprises a frequency divider for frequency-dividing the first clock signal to generate the third clock signal.

4. (Previously Presented) The system of claim 1, further comprising an RC oscillator for generating the second clock signal.

5. (Previously Presented) The system of claim 4, wherein the clock switch comprises a frequency divider for frequency-dividing the first clock signal to generate the third clock signal.

6. (Previously Presented) The system of claim 4, wherein the RC oscillator is connected with an external resistor for tuning the second clock signal.

7. (Original) The system of claim 6, wherein the external resistor comprises a variable resistor.

8. (Previously Presented) The system of claim 4, wherein the RC oscillator comprises a resistor network for determining the second clock signal.

9. (Previously Presented) The system of claim 4, wherein the microprocessor signals the local oscillator to turn off after the digital packet data is transmitted.

10. (Previously Presented) The system of claim 4, wherein the converter and transmitter signal the local oscillator to turn off after the digital packet data is transmitted.

11. (Original) The system of claim 1, further comprising a peripheral circuit connected to the microprocessor.

12. (Cancelled).

13. (Cancelled).

14. (Currently Amended) A method for transmitting data with an RF transmitter system having a single crystal oscillator and including a microprocessor connected with a converter that is further in turn connected to a transmitter, the method comprising the steps of:

receiving at a local oscillator a frequency signal from an external crystal oscillator;

generating at said local oscillator a first clock signal at a radio frequency ~~with a~~ responsive to the external crystal oscillator frequency signal for providing to the transmitter a carrier signal ~~responsive to~~ upon receipt of a control signal from the microprocessor to start generation of the first clock signal;

generating a second clock signal and a third clock signal by dividing down the first clock signal for respectively providing to the microprocessor and converter clock signals of respectively reduced frequency;

converting digital data output from the microprocessor into digital

packet data by the converter for output to the transmitter; and

transmitting the digital packet data modulated on the first clock signal.

15. (Cancelled).

16. (Currently Amended) A method for transmitting data with an RF transmitter system having a single crystal oscillator and including a microprocessor connected with a converter that is in turn connected to a transmitter, the method comprising the steps of:

receiving at a local oscillator a frequency signal from an external crystal oscillator;

generating at said local oscillator a first clock signal at a radio frequency ~~with a~~ responsive to the external crystal oscillator frequency signal ~~responsive to~~ upon receipt of a control signal from the microprocessor to start generation of the first clock signal;

generating a second clock signal using an RC oscillator;

generating a third clock signal from the first clock signal output from the ~~crystal~~ local oscillator for coupling to the converter, the third clock frequency being a lower frequency than a frequency of the first clock signal;

generating a fourth clock signal from the second clock signal for

coupling to the microprocessor, said fourth clock signal being a lower frequency than the frequency of the first clock signal and being a higher frequency than the third clock signal;

outputting digital data from the microprocessor for transmission by the transmitter;

converting the digital data output from the microprocessor into digital packet data by the converter; and

modulating the digital packet data with the first clock signal in the transmitter for transmitting an RF signal therefrom.

17. (Previously Presented) The method of claim 16, wherein the step of generating a fourth clock signal from the second clock signal comprises the step of frequency-dividing the second clock signal.

18. (Previously Presented) The method of claim 16, further comprising the step of tuning an external resistor connected to the RC oscillator for determining the oscillator output signal.

19. (Previously Presented) The method of claim 16, further comprising the step of trimming a built-in resistor network connected to the RC oscillator for determining a frequency of the oscillator output signal.

20. (Previously Presented) The method of claim 16, further comprising the step of the microprocessor signaling the crystal oscillator to stop generating the first clock signal after the RF signal is transmitted.

21. (Previously Presented) The method of claim 16, further comprising the step of the microprocessor signaling the converter to turn off after the RF signal is transmitted.

22. (Previously Presented) The method of claim 16, further comprising the step of the microprocessor signaling the transmitter to turn off after the RF signal is transmitted.